



**Addressing the Challenges of
Recovery & Rebuilding
from Hurricanes Katrina & Rita**

**Joint Committee on Education
Research Commercialization and
Educational Enhancement
Presentation
September 7, 2006**



Economic Development Programs

Previously approved Economic Development Programs:

- ✿ Small Firm Bridge Loans
- ✿ Long Term Loans
- ✿ Loan & Grant Program
- ✿ Technical Assistance to Small Firms
- ✿ Workforce Training
- ✿ Tourism Marketing

To be presented to LRA Board, Sept. 2006:

- ✿ **Research Commercialization and Educational Enhancement Program -- \$28.5 million**



Economic Development Programs

Summary: Restore economic strength of the storm-impacted areas, focused on short-term revitalization and long-term growth

In the short term, these programs will:

- ✦ Provide small firms with loans, grants, technical assistance, and trained workers**
- ✦ Target workforce training in areas of highest growth**
- ✦ Stimulate economic advancement by strengthening science & technology research with top research talent and education**



Economic Impact of Research Faculty

✿ **Louisiana's scientific research faculty received more than \$224 million in Federal research and development expenditures. (NSF)**

✿ **Universities in New Orleans's area account for 62 percent of this Federal research funding. (Board of Regents)**



Loss of Research Capacity

Higher Education Institutions Losses:

- ✦ **Direct revenue: more than \$229 million**
- ✦ **Facilities and infrastructure: in excess of \$400 million**
- ✦ **Key research and educational faculty being recruited out-of-state**



Restoring Research Capacity

Disaster CDBG Funds (\$28.5 m) paired with other funding streams to restore lost research & educational facilities and capacity

Other funding streams include:

- ✿ FEMA Public Assistance (90% of replacement costs)**
- ✿ CDBG Infrastructure Funds (cover 10% FEMA match)**
- ✿ Higher Ed Assistance (\$95 m) – provided by Congress to help meet immediate postsecondary education recovery needs**
- ✿ CDBG Recovery Workforce Training Program**



Economic Development Program

Research Commercialization and Educational Enhancement Program (RC/EEP) is designed to assist short-term recovery and long-term growth

Purpose:

To catalyze top-flight institutions to contribute to the economic growth of the affected regions and the state through educating the advanced technology workforce, attracting research talent, and commercializing intellectual property



Program Details

- ✦ **Amount: \$28.5 million**
- ✦ **Administered by the Board of Regents**
- ✦ **Complement and expand scientific and technology related research investments by the State**
- ✦ **Modeled after State Initiatives such as the Louisiana Gene Therapy Consortium**
- ✦ **National Model: Georgia Research Alliance**



Program Goals & Objectives

- ✦ **Build upon Louisiana's commitment to science and technology to restore vital areas of university research in the storm-impacted areas**
- ✦ **Target investment in key research faculty and their research programs to encourage the development of new discoveries and convert these into products, companies, and jobs**
- ✦ **Invest in educational opportunities for students to enter scientific and technology-related research workforce pipeline**



Program Components

2 Main Components:

-  **Strategic Plan to guide investments**

-  **Pilot Program for institutions in most severely impacted areas**



Strategic Plan will:

- ❖ Identify key research areas for focus**
- ❖ Recommend investments in research talent -- both faculty and students**
- ❖ Provide a statewide plan - CDBG funds will be used for the planning work in the affected areas; private funds will be sought to cover planning for other areas of the state**



Pilot Initiative Will Provide:

- ❖ Funds to retain and attract top research faculty**
- ❖ Resources for faculty to support research**
- ❖ Scholarships, fellowships, & stipends for students to pursue education and work experiences in the targeted research fields**



Pilot Program Components:

Research

-  Eminent Scholars program

-  Core resources and programs

Commercialization

-  Develop support infrastructure to enhance transfer of intellectual capital to marketplace

Education and Training

-  Retain key faculty

-  Expand education and training opportunities in science and technology fields, with emphasis on low- to moderate-income students



Building on Louisiana's Strengths

RC/EEP will build upon Louisiana's investments in research development and commercialization, including:

- ❖ Louisiana Gene Therapy Consortium (LGTC)**
- ❖ Louisiana Cancer Research Center**
- ❖ New Orleans BioInnovation Center**
- ❖ The Advanced Materials Research Institute (AMRI) at UNO**
- ❖ Louisiana Optical Network Initiative (LONI) and National Lambda Rail**



Example of Results of Investments:

- ❖ Louisiana Gene Therapy Consortium (LGTC)**
- ❖ State-funded consortium of academic, government and private stakeholders to invest in the development and market-potential of gene therapy research and education**
- ❖ Makes investments in:**
 - ❖ World-class researchers – Eminent Scholars**
 - ❖ Technicians and post-docs**
 - ❖ Supplies and Equipment**



Gene Therapy Consortium Results:

- ✿ **Leveraging of \$60 Million in federal grants.**
 - ✿ **850% Return on Investment from state's initial \$7 million commitment.**
 - ✿ **Commercialization outcomes include: 22 gene therapy research projects, 19 pre-clinicals in animals, 4 patent applications, and one start-up company.**



Gene Therapy Consortium Results:

Darwin Prockop, M.D., Ph.D., Professor of Biochemistry and Director, Center for Gene Therapy, Tulane University Health Sciences Center

- ✿ **Discovered ground-breaking treatment for using adult stem cells to treat genetic illnesses.**
- ✿ **Developing clinical application of research breakthrough.**
- ✿ **Increased employment from 17 people in 2001 to more than 80 people in 2005.**



Next Steps

**Respond to Legislative
and Public input**

Ongoing

LRA Board Vote

September 14

JLCB Vote

September 19

**Action Plan Amendment to Legislature by mail
ballot (15 day process)**

**Action Plan will be submitted by Governor to
HUD upon Legislative approval**